

Charleston Green Committee Retreat With The Rocky Mountain Institute



November 20, 2008

SUPER GOALS:

1. Improve Human Health and Quality of Life
2. Advocate Social and Environmental Justice/Fairness
3. Reduce Energy Consumption
4. Reduce Water Consumption
5. Improve Air & Water Quality
6. Minimize Greenhouse Gases (GHG)
7. Protect Against Sea Level Rise
8. Protect Natural Resources including sustainable agriculture
9. Work Toward a Goal of Zero Waste
10. Reduce Municipal Costs
11. Consider Lifecycle Goals
12. Increase Natural Infrastructure
13. Promote Land Use Driven Transportation & Infrastructure Decision Making
14. Promote Sustainable Land Use Design
15. Protect/Promote Sense of Place
16. Increase Inter-governmental Cooperation
17. Create/Encourage Diversity of Non-Carbon Producing Options
18. Maximize Economic Development/Technology/Job Opportunities to Foster the (Local) Green Economy/Market

PRINCIPLES

1. "Use Nature as Infrastructure"
2. "Do no harm"
3. "Understand and enhance culture, natural endowment, community, healthy lifestyles and economic vitality"



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Votes

Land Use and Planning and Transportation Priorities with Indicators



- 27 Reduce dependency on single occupancy vehicle and support the increase in supply of frequent and convenient transportation including reducing paved area, any kind of non-auto use and potential for light rail: 1) transit rider-ship, 2) commuter traffic time, 3) distance to transit hub 4) liquid fuel consumption
- 4 Expand and enhance the bike transportation system: 1) bike sales, 2) % growth in bike paths, 3) bike racks
- 6 Increase fuel efficiency and non-carbon fuel sources: liquid fuel consumption
- 2 Improve air quality: normal measures, monitoring
- 3 Improve water quality: normal measures
- 24 Reduce sprawl and increase walkability through sustainable community design, neotraditional design and transit oriented design: 1) distance from home to basic service (5 min.) 2) miles of sidewalks 3) distance to green space 4) units per acres
- 3 Reuse/remediate brownfields (Adaptive Reuse): % of brownfields remediated
- 6 Protect agriculture and rural land and create a clear definition of the urban edge: 1) % land under cultivation, 2) proximity to market, 3) conversion of open land to developed, 4) total # of protected acres

3 Increase urban forest: Ufore index

11 Provide affordable housing: 1) affordability per median income, 2) proximity to services, 3) distance to work

Buildings Priorities with Indicators



20 Increase in % of green buildings: 1) LEED or other standards 2) energy use per square foot

Improved indoor environmental quality: 1) Employee sick days / ER visits 2) Org. insurance 3) Retention 4) # of companies that test for IEQ

10 Improve building's contextual fit (ecologically and architecturally): 1) Proximity 2) Certification

6 Maximize adaptive reuse: 1) New construction v. renovation per square foot 2) Demolition of historic structures

9 Reduce construction waste: Tons diverted

3 Housing affordability

6 More awareness among the community regarding green buildings: 1) # of green building awareness programs 2) # of accredited professionals 3) # of days on the market 4) listed on MLS

7

4 Green building transformation should include all income levels.

Votes

0

Energy efficient mortgages

9

Understand whole system life-cycle cost

14

More efficient and effective use of materials: 1) % reused content 2) % recycled content 3) Distance to point of extraction and manufacture

Recycling and Waste-Management Priorities with Indicators



22

Increase reduce-reuse-recycle of waste, particularly C&D debris Reduce the amount of waste that is land-filled and incinerated : 1) % diversion 2) recycling rate (residential) 3) total tonnage

4

Increase procurement standards that minimize waste: 1) post-consumer recycled content 2) Amount of recycled content building material 3) Recycling rate

4

Tertiary treatment of waste water: 1) Normal measures 2) EPA standards

17

Increase access to recycling in public places: 1) # of bins and collection points 2) quantity of recyclables

17

Improve efficiency of collection (transportation and diversion system: 1) Cost per pound

0

Life cycle cost/analysis (equalize recycling and waste collection costs) make costs and benefits transparent

Energy Priorities with Indicators

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|----|---|
| 16 | Increased % of renewable energy: 1) megawatt capacity mix 2) % consumer choosing renewables 3) tax deduction info (state and federal) |
| 20 | Improve energy efficiency: 1) BTU per person 2) BTU per square foot |
| 13 | Regulatory environment that encourages conservation and efficiency: Options for demand side management |
| 1 | Reduce municipal cost to city and taxpayers |
| 12 | Improve energy efficient behavior: 1) people exposed to educational events 2) assess existing behavior |
| 3 | Make energy consumption tangible and transparent |
| 8 | Energy efficiency workforce (builders, planners, I.T. etc.): 1) accredited professionals 2) education programs |
| 2 | Increase efficiency of production and distribution: 1) Cost of delivered kwh 2) net-metering 3) # of cogen facilities |
| 4 | Increased urban tree canopy: # of trees per acre |

